

SP

Notice of Allowability	Application No.	Applicant(s)	
	10/685,530	KIRCHHOF, DARRIN GLEN	
	Examiner	Art Unit	
	Christopher Verdier	3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 28 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>11-4-03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Alan Kagen, Attorney of Record, on May 9, 2005.

The application has been amended as follows:

In the Claims:

In claim 4, second to last line, "(lbm/sec)" has been deleted.

In claim 6, second to last line, "(lbm/sec)" has been deleted.

In claim 8, third to last line, "(PSIA)" has been deleted.

In claim 8, second to last line, "(PSIA)" has been deleted.

In claim 8, last line, "(F)" has been deleted.

In claim 8, last line, "(lbm/sec)" has been deleted.

In claim 12, second to last line, "(lbm/sec)" has been deleted.

In claim 14, second to last line, "(lbm/sec)" has been deleted.

In claim 16, third to last line, "(PSIA)" has been deleted.

In claim 16, second to last line, "(PSIA)" has been deleted.

Art Unit: 3745

In claim 16, last line, "(F)" has been deleted.

In claim 16, last line, "(lbm/sec)" has been deleted.

The above changes to the claims have been made to remove limitations in parentheses from the claims.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The claims of the instant application are directed towards an unobvious improvement over the invention patented in U.S. Patent 4,303,369 to Hisano. Hisano discloses a steam turbine having a valve 42, 43, 44 controlled by a controller 41 based on calculated thermal stress, centrifugal stress, and brittle fracture toughness of a rotor of the steam turbine during operation of the steam turbine. The improvement of claim 1 of the instant application comprises controlling steam flow through the steam turbine, comprising determining a maximum heat transfer rate based on thermal stress calculations in the rotor, calculating maximum steam flow rate based on the maximum heat transfer rate, determining actual steam flow through the steam turbine, and controlling the valve based on the difference between the actual steam flow rate and the maximum steam flow rate. The improvement of claim 9 of the instant application comprises calculating a maximum steam flow rate based on parameters relating to thermal stress in the turbine rotor, determining an actual steam flow rate through the steam turbine, and controlling the valve based on the difference between the actual steam flow rate and the maximum steam flow rate. The primary reason for allowance of claim 17 of the instant application comprises the

Art Unit: 3745

controller calculating a maximum steam flow rate base on a maximum heat transfer rate, determining an actual steam flow rate through the steam turbine, and controlling the steam turbine inlet valve based on the difference between the actual steam flow rate and the maximum steam flow rate.

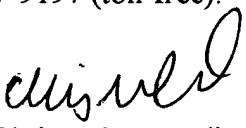
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.
May 9, 2005


Christopher Verdier
Primary Examiner
Art Unit 3745